



EARTH SCIENCE
APPLIED SCIENCES
DISASTERS

ADVANCING SCIENCE TO BUILD DISASTER RESILIENCE



NASA's Disasters program advances the use of Earth observing data and applied science to improve the prediction of, preparation for, response to, and recovery from disasters around the world. **Before, during, and after disasters strike**, our team coordinates with domestic and international partners, decision-makers, and local governments, providing actionable data to recover from disaster impacts and build resilient communities.

We exemplify NASA's commitment to **open science**, developing free and accessible resources that use Earth observations to reveal new perspectives on disaster risk. Using a One NASA approach, we leverage NASA's expertise and resources to put **Earth science into action**, responding boldly and proactively to the growing threats of climate change and extreme events.

Disasters occur when a hazard - like a hurricane, earthquake or volcano — strikes an exposed and vulnerable population.



HAZARD



EXPOSURE



VULNERABILITY



DISASTER RISK

By empowering partners with tools to understand disaster risk, we reduce disaster impacts and build resilient communities.

LEARN MORE:



DISASTERS.NASA.GOV



Strengthening the Global Disaster Management Community

We actively contribute to international partnerships, working groups, and science meetings to share knowledge and identify the social, environmental and economic concerns common to communities around the world. We work to build deeper connections, foster mutual understanding, and increase user capacity. We invite you to **join our NASA Disasters community** and support our mission to reduce global disaster risk.

PROGRAM ELEMENTS



Disaster Applications

Our projects advance the use of Earth observations to support decisions across the disaster cycle. We develop tools that combine data on hazards, vulnerability and exposure which reduce risk for disaster-stricken communities, and advance these tools towards operational use.



Disaster Response Coordination System

We leverage NASA's scientific expertise and cutting-edge technology to aid teams responding to disasters on the ground. We work with government agencies, NGOs and private sector partners to provide insights that inform decision making and reduce impacts on lives and livelihoods.

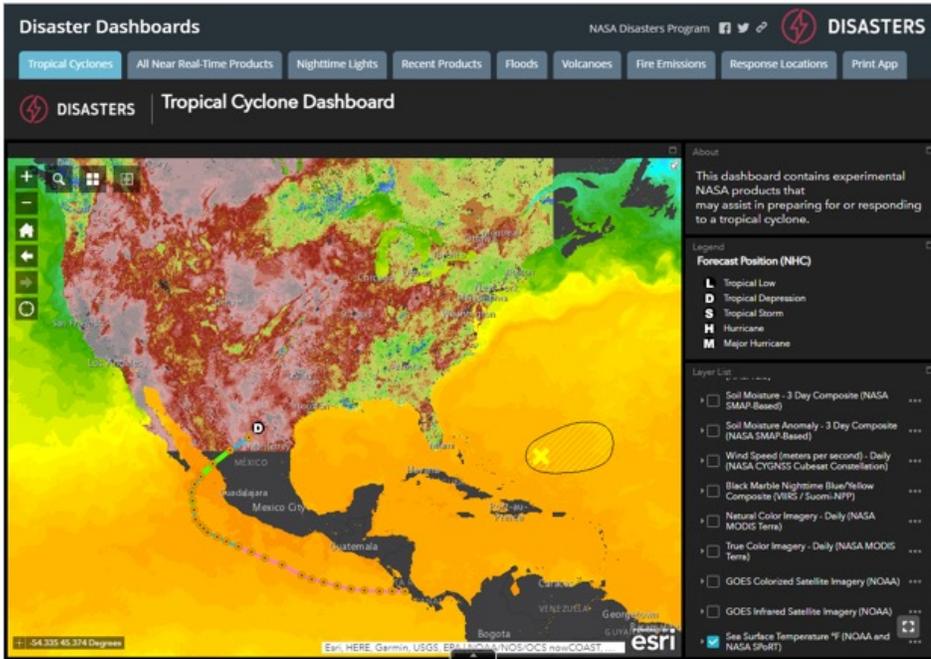


NASA Disasters Mapping Portal

Our free and openly accessible online portal hosts the program's geospatial disaster data, enabling collaboration among data producers, applications scientists, and partners. Standardized geographic information system (GIS) format allows for easy integration into decision-support tools.



NASA DISASTERS TOOLS & RESOURCES



The Tropical Cyclone Dashboard on the NASA Disasters Mapping Portal provides a variety of near real-time datasets for tracking tropical cyclones and their impacts. Credits: NASA

NASA DISASTERS MAPPING PORTAL

The Disasters Mapping Portal is a free and open web interface for Earth system science. View, analyze and download the latest near real-time and disaster-specific products and models on hazards, exposure and vulnerability in Geographic Information Systems (GIS) format. Products are available as REST and open-source compatible WMS endpoints.



Visit the Disasters Mapping Portal at:

[MAPS.DISASTERS.NASA.GOV](https://maps.disasters.nasa.gov)

DISASTERS TRAINING

NASA's Disasters program supports education and outreach, including working with science societies, civil societies and humanitarian organizations, government and state agencies, U.N. organizations, and international and regional institutions. Key partnerships with other NASA programs, such as the Applied Sciences Capacity Building program, provide in-person and online training focusing on access and applications of remote sensing observations for disaster management.

appliedsciences.nasa.gov/join-mission/training?program_area=14

OTHER RESOURCES

A collection of datasets, tools and other resources that can aid your community is available at: appliedsciences.nasa.gov/what-we-do/disasters/practitioner-resources.



FEMA responders surveying flooded areas. Credit: FEMA

CONNECT WITH US

Sign up for our newsletter for more news and resources that can help your community prepare for disasters: appliedsciences.nasa.gov/join-mission/stay-connected

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